

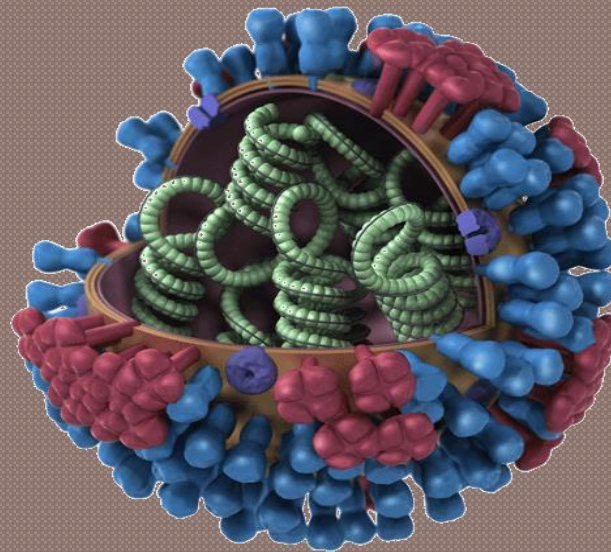
2015-2016 Influenza Season Key Points

By
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Virology

➤ Influenza viruses circulating

- Predominant virus: Influenza A (H1N1)
- Early in the season: Influenza A (H3N2)
- Both lineages of influenza B circulated throughout the season



Hemagglutinin



Neuraminidase

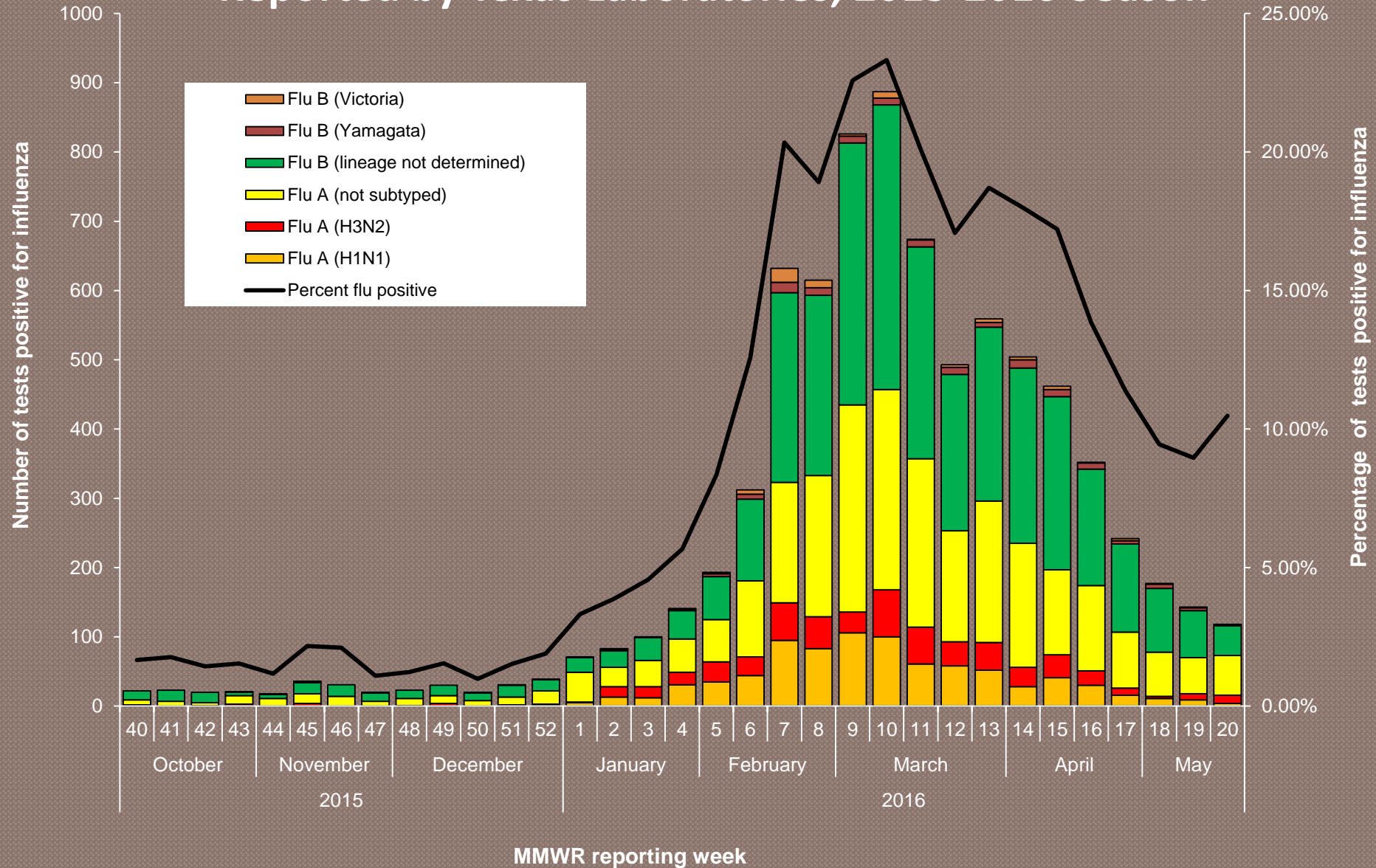


M2 Ion Channel



RNP

Number and Percentage of Tests (Antigen, Culture, PCR) Positive for Influenza by Type, Subtype, and Lineage Reported by Texas Laboratories, 2015-2016 Season



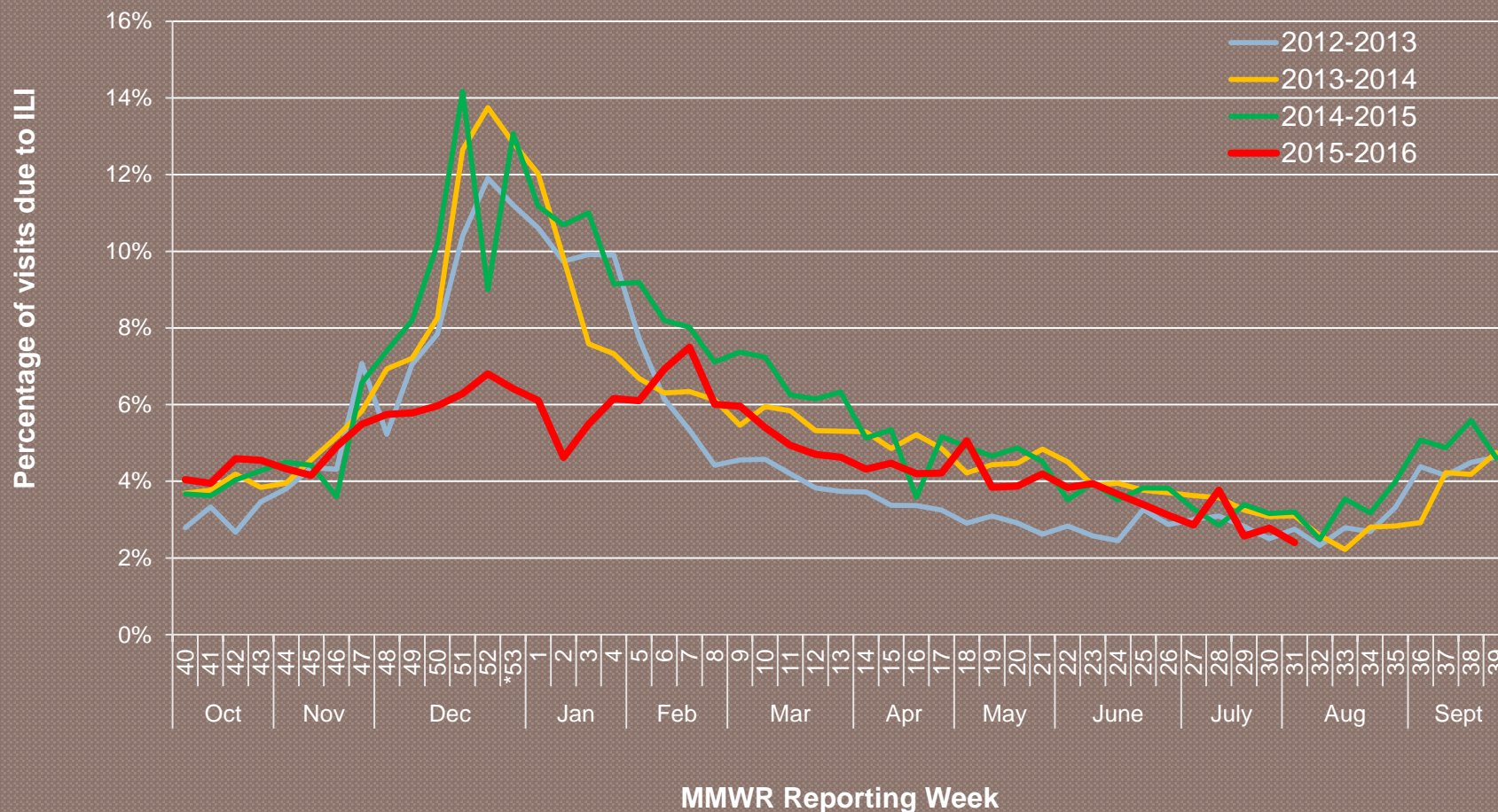
Flu Activity

➤ Peak of Flu Activity

- According to laboratory data, flu peaked in Texas in March 2016
- Late flu activity peak when compared to the previous three seasons (2012–13, 2013–14, and 2014–15)

ILI Activity

**Percentage of Visits Due to Influenza-like Illness Reported
by Texas ILINet Participants, 2012-2016 Seasons***

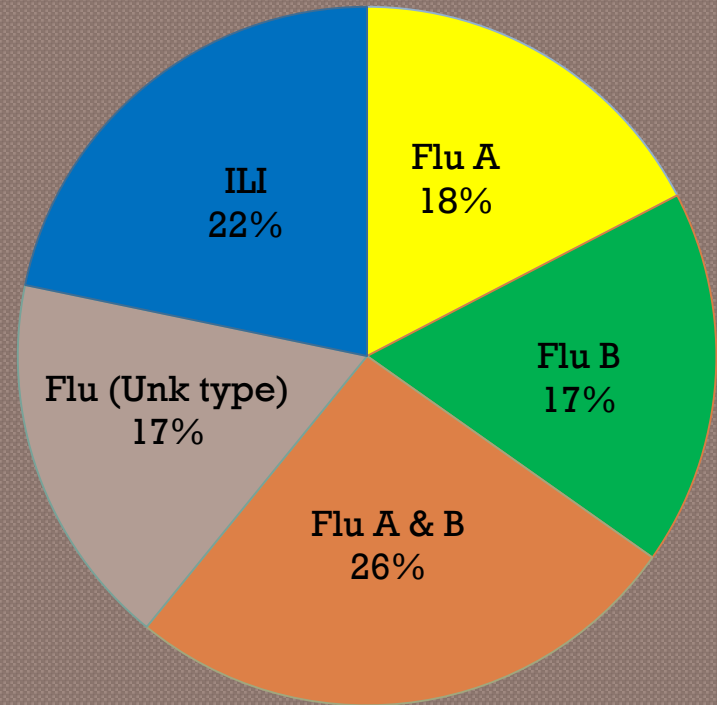


*There was no week 53 in the previous influenza seasons displayed above; the week 53 data for these seasons is an average of weeks 52 and 01.

ILI/Flu-associated Outbreaks*

- The number of reported outbreaks in Texas decreased by 58.2% when compared to the last flu season
 - 23 in 2015-16 season vs 55 in 2014-15 season
- Over 65% of the outbreaks were reported in schools

Number of Reported ILI/Influenza-associated Outbreaks in Texas by Influenza Type, 2015-2016 Season



2015–16 Influenza-associated Pediatric Mortality

- 7 influenza-associated pediatric deaths*
 - More than half of the children were positive for influenza A
 - 3 (~43%) children had no underlying health conditions
 - 2014-15 season: 9 out of 19 (~47%) had no underlying health conditions
 - 33.3% of the children with a known vaccination status were vaccinated for influenza

Pneumonia & Influenza (P&I) Mortality Data

- 6983 P&I deaths have been reported for the season *

Table 7: Texas P&I Deaths Occurring Oct. 04, 2015-Aug. 10, 2016* by Age

Age Category (years)	Number of P&I Deaths ⁺	Mortality Rate (per 100,000)
0 - 4	32	1.57
5 - 17	17	0.32
18 - 49	419	3.35
50 - 64	1167	23.48
65 +	5348	158.92
Overall	6983	24.73

*NOTE: Data are provisional and subject to change, errors, and duplicates

⁺ If the cell count is less than 10, the number of P&I deaths is suppressed and <10 is written in the cell.

Table 8: Texas P&I Deaths Occurring Oct. 04, 2015-Aug. 10, 2016* by Health Service Region (HSR)

HSR	Number of P&I Deaths	Mortality Rate (per 100,000)
1	311	34.57
2/3	1968	24.10
4/5N	540	34.00
6/5S	1559	21.20
7	814	23.86
8	716	24.49
9/10	414	27.06
11	661	27.89
Overall	6983	24.73

*NOTE: Data are provisional and subject to change, errors, and duplicates

2015–16 Influenza Vaccine Effectiveness (VE) Estimate

- 2015-16 vaccine was a better match than the 2014-15 influenza vaccine
 - Adjusted* overall VE is 47%^ vs. 23% for last season
- Individual influenza virus strains adjusted* overall VEs
 - A/H1N1- 41% (31% to 51%)
 - A/H3N2- 45% (9% to 66%)
 - B/Yamagata- 55% (41% to 66%)
 - B/Victoria- 55% (38% to 68%)

^Estimate from Nov 2, 2015–April 15, 2016

*Multivariate logistic regression models adjusted for site, age categories (6m-8y, 9-17y 18-49y, 50-64y, ≥65y), sex, race/Hispanic ethnicity, self-rated general health status, interval from onset to enrollment, and calendar time (biweekly intervals)

HPAI & LPAI H7N8 – 2016

- Turkey flocks in Dubois Co, Indiana
 - HPAI & LPAI H7N8 detected in January
- Outbreak response
 - USDA-APHIS response involved USDA employees and contractors
 - Depopulation of
 - Commercial turkeys: 258,045
 - Commercial chickens (layers): 156,178
 - Outbreak response ended 2/22/16
- States asked to monitor human health
- No human H7N8 cases detected



ANY
QUESTIONS
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